Name: Dr. Anirban Bose

**Department: Computer Science & Engineering** 

Contact Nos.: 9903244083

**Qualifications: PhD** 

**Designation: Assistant Professor (Grade 3)** 

**VIDWAN ID: 187539** 

Experience (Teaching / Research / Industry, in years): 14 years

Date of Joining at the Present Institution: 26/07/2006

**Examinations Cleared: GATE** 

## **Qualifications Summary (Reverse chronological order):**

| Degree           | Subjects  | From<br>- To   | Institute  |
|------------------|---|----------------|--|
| PhD              | On Improved Spread Spectrum Image Watermark Recovery in Compressed Sensing Measurements | 2013 -<br>2019 | Indian Institute of Engineering Science<br>and Technology, Shibpur, Howrah |
| M.Tech           | Control System<br>Engineering   | 2004 -<br>2006 | IIT Kharagpur  |
| B.Tech           | Instrumentation<br>Engineering  | 1998 -<br>2002 | Haldia Institute of Technology   |
| 10+2             | Science   | 1997           | W.B.C.H.S.E  |
| 10 <sup>th</sup> | Science   | 1995           | W.B.B.S.E  |

## **Experience Summary** (In chronological order): Designation, Organization, Date From – Date To

| Designation                    | Organization   | From       | То         |
|--------------------------------|--|------------|------------|
| Senior Lecturer                | Dr. B. C. Roy<br>Engineering<br>College,<br>Durgapur | 26/07/2006 | 30/06/2010 |
| Assistant<br>Professor (Gr. 2) | Dr. B. C. Roy<br>Engineering<br>College,<br>Durgapur | 01/07/2010 | 31/12/2019 |
| Assistant<br>Professor (Gr. 3) | Dr. B. C. Roy<br>Engineering<br>College,<br>Durgapur | 01/01/2020 | present    |

Specialization/Research Interest: Image Watermarking, Pattern Recognition, Machine Learning

## **Awards & Recognitions**

Best paper/ scholarship/Position in university exam / awards while at industry/ other organizations etc.

- Achieved **GATE** percentile of **99.61** (All India rank 21).
- Received IEEE Young Professional Best paper award in *Computational Intelligence*, *Communications*, and *Business Analytics (CICBA)* 2017.

### Courses taught:

B.Tech: Specify the name of the subject/s (Theory first and then practical): Basic Electronics, Control System, Process Control, Process Control II, Digital Image Processing, Digital Signal Processing, Basic Electronics Lab, Control System Lab, Process Control Lab, Industrial Instrumentation Lab

M.Tech: specify the name of the Subject/s: NA

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#### **Online Mode of Teaching:**

The Faculty member needs to specify the online teaching/ assessment method adopted. (Link to any faculty created resources for Lecture notes / PPT/ Video Lecture etc. in Google Drive / Weblink etc)
Lectures are provided through either PPT or scanned documents and class assessments are taken using Google forms

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### Journal:

- A. Bose and S. P. Maity, "Spread spectrum image watermark detection on degraded compressed sensing measurements with distortion minimization", Multimedia Tools and Applications, vol. 77, no. 16, pp. 20783 20808, 2018, ISSN: 1380-7501.
- A. Bose and S. P. Maity, "Spread Spectrum Watermark Detection on Degraded Compressed Sensing", IEEE Sensors Letters, vol. 1, no. 5, pp. 1 4, 2017, ISSN: 2475-1472.
- A. Bose and S. P. Maity, "On robust watermark detection for optimum multichannel compressive transmission", Microsystem Technologies, 2018, vol. 24, no. 3, ISSN: 0946-7076.

### **Conference:**

## **International Conference**

- A. Bose and S. P. Maity and C. Delpha, "On improved spread spectrum watermark detection under compressive sampling", in Proc. of 5th European Workshop on Visual Information Processing (EUVIP), 10-12 Dec. 2014, IEEE, Electronic ISBN: 978-1-4799-4572-6.
- A. Bose and S. P. Maity and S. Maity, "Image watermarking on degraded compressed sensing measurements", in Proc. of International Conference on Advances in Computing, Communications and Informatics (ICACCI), 10-13 Aug. 2015, IEEE, Electronic ISBN: 978-1-4799-8792-4, Print ISBN: 978-1-4799-8790-0.
- A. Bose and S. P. Maity, "Improved spread spectrum compressive image watermark detection with distortion minimization", in Proc. of International Conference on Signal Processing and Communications (SPCOM), 12-15 June

2016, IEEE, Electronic ISBN: 978-1-5090-1746-1, Print on Demand(PoD) ISBN: 978-1-5090-1747-8.

- A. Bose and S. P. Maity, "On improved CS-SS image watermark detection over radio mobile channel", in Proc. of Tenth Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), 18 - 22 December 2016, ACM, ISBN: 9781450347532.
- A. Bose and S. P. Maity, "On Robust Watermark Detection for Optimum Multichannel Compressive Transmission", in Proc. of Computational Intelligence, Communications, and Business Analytics (CICBA), March 24-25, 2017, Springer Singapore, Print ISBN: 978-981-10-6426-5, Online ISBN: 978-981-10-6427-2.

#### **Book:**

Name of the author/s (Make bold font for own name), "Title of the Book", Name of the Publisher, Year of Publication, ISBN Number (Print / Online)

**Ex: 3.** Opperman, **I., Hamalainen**, M., Iinatti, J. "UWB theory and applications" (John Wiley and Sons, 2004), Print ISBN 978-981-13-3121-3, Online ISBN 978-981-13-3122-0

## **Book Chapter:**

Name of the author /s (Make bold font for own name) "Title of the Chapter", "Page no. of the Chapter", "Title of the Book", "Name of the Publisher", Year of Publication. ISBN Number (Print / Online)

**Ex: 4. Opperman, I.**, Hamalainen, M., Iinatti, J. "Abc xyz" pp. 123-127 "UWB theory and applications" (John Wiley and Sons, 2004), Print ISBN 978-981-13-3121-3, Online ISBN 978-981-13-3122-0

#### **Supervision of Ph.D/M.Tech / B.Tech Projects:**

#### For Ph.D

- 1. Name of the student, Name of the supervisor, "Title of the thesis", Year, Name of the university (completed)
- 2. Name of the student, Name of the supervisor, "Title of the thesis", Year, Name of the university (Registered)

#### **Projects:**

 Name of the student/s (with university roll number), Name of the supervisor, "Title of the Project / thesis", Year (only final year 8<sup>th</sup> Sem Project for B.Tech and Thesis for M.Tech)

| Year | Title of the Thesis | Name of the | University Roll |  |
|------|---------------------|-------------|-----------------|--|

|      |   | Students   | No.  |
|------|---|--|--|
| 2016 | Automated Fruit/object quality detection system using feature extraction through image processing | Arghya Mukherjee<br>Avik Chatterjee<br>Tufan Atha              | 12000512008<br>12000512010<br>12000512060                |
| 2017 | Two stage Watermarking based Image Processing Technique   | Soumi Biswas<br>Ranjan Dutta<br>Souvik Ghosh                   | 12000513046<br>12000513036<br>12000513047                |
| 2018 | Designing Of PID<br>Controller for GA<br>Based Reduced<br>Order System                            | Shikha Shekhar   | 12005514014  |
| 2019 | Optimum Controller Design Based on GA Technique   | Jyoti Prasad Roy<br>Shubham Kumar<br>Singh                     | 12005515014<br>12005515027                               |
| 2020 | Model Predictive PI Controller Design using Machine Learning                                      | Anku Singh<br>Priyanshi Kumari<br>Nidhi Kumari<br>Prince Kumar | 12005516035<br>12005516016<br>12005516019<br>12005516018 |

#### **Invited Lectures:**

Topic of the lecture, Name of the event, organized by, Date

# Participation in seminar/conference/symposium/workshop/discussion meeting

Name of the event, duration, Year, Organized by.

- Participated in international conference on "Computing, Communication and Sensor Networks" held on 22 - 23<sup>rd</sup> November, 2012, organized by Purushottam Institute of Engineering & Technology, Rourkela, Orissa.
- Participated in the technical workshop titled as "Recent Trends in Machine Intelligence, Data Mining and Soft Computing Techniques and its Impact on Research and Development, held during 23<sup>rd</sup> - 24<sup>th</sup> November, 2013 and was organized by Dr. B. C. Roy Engineering College, Durgapur.
- Presented a paper in national seminar on "Research Scholar Day" held during 29<sup>th</sup> - 30<sup>th</sup> January, 2014 and was organized by Bengal Engineering and Science University, Shibpur.
- Participated in two week ISTE workshop on "Signals and Systems" conducted jointly by IIT Kharagpur and NIT Durgapur under NMEICT

- MHRD during 2<sup>nd</sup> 12<sup>th</sup> January 2014.
- Presented a paper titled "On Robust Watermark Detection for Optimum Multichannel Compressive Transmission" at CICBA during 24<sup>th</sup> -25<sup>th</sup> March, 2017, organized by Calcutta Business School.

## Participation in faculty development programmes

Name of the faculty development programmes, Online / Face-to-face/ From Date - To Date, Duration, Year, Organized by.

Attained ELITE grade in NPTEL FDP for the course named "Joy of Computing using Python" in September, 2020 (online).

## Organization of events (Dr. B. C. Roy Engineering College)

Name of the event, Date, Year

Organized a workshop titled as "Basics of Python" conducted jointly by FOSSEE and IITB at Dr. B. C. Roy Engineering College, Durgapur during 1<sup>st</sup> to 3<sup>rd</sup> May, 2019.

## Participation in administrative committees (selected)

Name of the post (Convener/Joint Convenor/Member secretary/Co-ordinator etc.), Name of the committee, year

Acting as a core committee member in "NAAC ACCREDITATION COMMITTEE" from 11<sup>th</sup> July, 2019.

Project Ideas Submitted to Govt. Agencies/ On-going Projects / Research Ideas under preparation & execution

Membership of professional bodies: IEEE, IETE, IEI, CSI, MGMI etc.